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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,798	12/12/2003	Carmo Ribeiro	71024-474	3882
27305 7	7590 03/11/2005		EXAMINER	
HOWARD & HOWARD ATTORNEYS, P.C. THE PINEHURST OFFICE CENTER, SUITE #101 39400 WOODWARD AVENUE			HOANG, TU BA	
			ART UNIT	PAPER NUMBER
BLOOMFIELI	D HILLS, MI 48304-515	48304-5151	3742	
			DATE MAILED: 03/11/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

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,	Application No.	Applicant(s)					
	10/735,798	RIBEIRO ET AL.					
Office Action Summary	Examiner	Art Unit					
	Tu Ba Hoang	3742					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	66(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	ely filed will be considered timely. the mailing date of this communication. (35 U.S.C. § 133).					
Status		•					
1) Responsive to communication(s) filed on 31 Ja	1) Responsive to communication(s) filed on <u>31 January 2005</u> .						
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•	—···						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.					
Disposition of Claims							
4) Claim(s) is/are pending in the applicatio	I) Claim(s) is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>27-30</u> is/are allowed.	5)⊠ Claim(s) <u>27-30</u> is/are allowed.						
6)⊠ Claim(s) <u>1-26 and 31</u> is/are rejected.	☑ Claim(s) <u>1-26 and 31</u> is/are rejected.						
•							
8) Claim(s) are subject to restriction and/or	8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10)⊠ The drawing(s) filed on <u>12 December 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
•	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form P1O-152.					
Priority under 35 U.S.C. § 119							
12)☐ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list	of the certified copies not receive	<b>0</b> .					
Attachment(s)							
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da						
2) Notice of Draitsperson's Patent Drawing Review (P10-946)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date <u>03/22/04</u> .		atent Application (PTO-152)					

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## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16, 19-21, 26, and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 16, there is a missing text between "in" and "portion" recited at line 2. The phrase "the first" should be inserted therebetween.

In claim 19, there is insufficient antecedent basis for "the joining surface on mating wall sections" recited at lines 1-2 in the claim or from the preceding claim 1. The term "portion" recited at line 2 should be in plural form (i.e., "portions").

In claim 26, the phrase "first portions" recited at line 3 should be "first portion" instead (i.e., singular form).

The term "locally thinned" in claim 31 is a relative term which renders the claim indefinite. The term "locally thinned" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear how thin would be considered "locally thinned" unless some "thin" dimensions or thicknesses are recited or defined.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 31 is rejected under 35 U.S.C. 102(b) as being anticipated by Jarrett et al (US 6,112,642). Jarrett et al shows all of the claimed features including a piston 30 shown in Figure 4 which comprises an upper piston portion or head member 42 having mating surfaces and a lower piston portion or skirt member 44 having mating surfaces, and a thin induction weld joint (column 6, line 1, i.e., "brazing weld") for uniting the mating surfaces, wherein the weld joint is thin at the joined mating surfaces since there is a very small gap or space between the mating surfaces. It is inherent.

Claim 31 is further rejected under 35 U.S.C. 102(e) as being clearly anticiapted by Foster et al (US 6,736,305). See Figures 3 and 5.

It is noted that since claim 31 is directed to an apparatus or article such as a piston, a weld joint or joint between the piston portions or mating surfaces can be formed by any process such as induction welding, friction welding, laser welding, and

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etc in which such process would not be germen to the patentability of the weld joint itself since no patentable weight will be given to such process unless this claim is a process or process by product claim.

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## **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Lo ngi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of U.S. Patent No. 6,825,450. Although the conflicting claims are not identical, they are not patentably distinct from each other because while "heating the joining surfaces of the first and second portions to an elevated bonding temperature and thereafter bringing the joining surfaces of the first and second portions into contact with one another", it is obviously clear that such joining surfaces of two different first and second portions would lie in different planes. It is inherent and the patented claim would not exclude this feature.

Claims 27-30 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not show or fairly suggest the weld joint between the mating surfaces of the piston (i.e., the thickness of the mating surfaces) can be reduced by pulling the piston portions axially away from one another while the joined mating surfaces are still hot in the manner recited in claim 27.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Nomura et al (US 6,222,150), Wohrstein (US 5,549,335), and Ribeiro et al (US 2002/0046593 A1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Ba Hoang whose telephone number is (571) 272-4780. The examiner can normally be reached on Mon-fri from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tu Ba Hoang Primary Examiner Art Unit 3742

March 07, 2005